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THE

PHYTOLOGIST.

A BOTANICAL JOURNAL.

'Ως ἐμεγαλύνθη τὰ ἔργα σου, Κύριε!—πάντα ἐν σοφίᾳ ἐποίησας.
PSALM. civ. 24.

Benedicite universa germinantia in terra Domino; laudate et superexaltate Eum in sæcula.—*Hymn. iii Pasvor.* v. 76.

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CHAPTERS ON BRITISH BOTANY.

CHAPTER VI.

Dr. William Turner and the earlier British botanists.—The Father of English botany.—Turner and Ray.—Dr. Bulleyn.—Dr. Thomas Gibson.—Gesner.—Harrison.—Merrett.—Turner's influence on his contemporaries and on posterity.—Plants of Northumberland, Cambridge, Middlesex, Kent, Somerset, etc.—General List of British Plants described in the Herbal.

Dr. William Turner, the author of Turner's 'Herbal,' and also of many other works, on theological controversy, medicine, etc., has been very justly called the "Father of British Botany." He is the first original English botanist, and he was evidently as well read in the works of Theophrastus, Dioscorides, Pliny, Paulus Egineta, Avicenna, Simeon Seth, etc., as he was well acquainted with the plants of England and Germany. His great work on botany is the result of much observation and experience, and a lasting monument of his industry, erudition, and critical judgment. One of his contemporaries, Dr. Bulleyn, observes, that his "Boke of Herbes will alwaies growe grene, and neuer wither as long as Dioscorides is helde in minde by us mortal wights."

The illustrious Mr. John Ray well deserves the honour of precedence among all English authors as the first who introduced method or system into this branch of human knowledge; so Dr. William Turner was the first writer, in our vernacular, who added the fruits of his own researches to the meagre compilations from the 'Schola Salernitana,' E. Macer, Bartholomæus, the 'Grete Herball,' Dr. Linacre's Macer, etc. etc.

Dr. Pulteney, in his 'Sketches of the Progress of Botany in England,' relates that "the true era of botany in England commences with Dr. William Turner, the earliest, most judicious, and most learned authority, whose abilities, both as a critic and a philologist, are highly distinguished, and whose uncommon diligence, learning, and originality have secured him a certain passport to posterity."

In the present series of chapters it is not proposed to enter, with much detail, into the lives and works of our eminent botanists, but rather to offer succinct notices of the British plants described in their works, stating when, where, and by whom they were first observed; but a little relaxation of our plan will be

BRITISH MUSEUM

made in treating of the life and labours of the first real observer and true describer of our native species.

The following brief notice of Dr. Turner, and of his works, is compiled from 'Summarium Illustrium Majoris Brit. Scriptorum,' by John Bale, Bishop of Ossory, from Thomas Fuller's 'Worthies of England,' from Wood's 'Athenæ Oxonienses,' Tanner's 'Bibliotheca,' and last but not least, the Histories of Northumberland.

William Turner, as Dr. Pulteney writes, vol. i. p. 59, "was born at Morpeth, in Northumberland, and educated at Pembroke College, Cambridge, under the patronage and assistance of Sir Thomas Wentworth;" and Hodgeson, in his 'History of Northumberland,' vol. ii., supplies the following note about our author:—

"Just at the dawn of literature in England, two stars of pre-eminent lustre appeared in Morpeth,—William Turner and Thomas Gibson, both justly celebrated as divines, physicians, and naturalists."

In Mackenzie's 'View of the County of Northumberland,' vol. ii. p. 184, there is a note to the effect that "an Herbal," by Thomas Gibson, still exists in MS. Can any reader of this inform the public where this early unpublished treatise lies buried?

Fuller's notice of Turner, see 'Worthies of Northumberland,' is very brief, very lively, and, like some other articles by this quaint author, is more conjectural than correct. It is not an exhaustive, but it is a very good-natured account of this early botanist.

"He was born at Morpeth, bred in the University of Cambridge, where he became an excellent Latinist, Grecian, orator, and poet. He was very zealous in the Protestant religion, writing many books in the defence thereof, and much molested for the same by Bishop Gardiner and others. He was kept long in durance, and escaping at last by God's Providence, fled beyond sea. At Ferrara, in Italy, he commenced doctor of physic: there gaining his degree with general applause. He wrote a great herbal and a book of physic for the English gentry, as also treatises of plants, fishes, stones, metals, etc. He afterwards went into Germany, where he lived in great credit and practice, and, as I conjecture, died there in the reign of Queen Mary.* Reader, I conceive him worthy of thy special notice because he was both a confessor and a physician, qualifications which

* Neither of the late learned editors of Fuller's 'Worthies' has thought it worth his while to correct by a note the erroneous conjecture of their author.

meet not every day in the same person. . . . Thomas Gibson. It is pity to part him from the former, because symbolizing in many particulars of concernment.

Both
1. Born in this county, and in the same town of Morpeth.
2. Flourishing at the selfsame time.
3. Physicians by profession; this Thomas did incredible cures of disease.
4. Writing of the same subject, the nature of *hearbs*.
5. Professed enemies to Popery."*

Thus far honest Thomas Fuller.

It will be seen below that Dr. Turner lived several years after the time when Fuller conjectures that he died, and he was as hostile to Popery as he was zealous for the Reformation.

Industrious Anthony Wood, who had no partiality for ultra-Protestants, informs his readers that "he, Turner, was much addicted to the opinions of Luther," and that he was besides hot-headed and meddlesome. This crabby early authority supplies us with the following account of his death after enumerating some of his works:—

"After all the rambles and troubles that our author Turner made and did endure, he did quietly lay down his head and departed this life 7 July in 1568. Whereupon his body was buried in the church of St. Olaves,† in Hert Street, in London, leaving behind him several children."

Dr. Bliss, the amiable commentator and editor of 'Athenæ Oxonienses,' informs the readers that

"He (Turner) married the daughter of George Ander, an Alderman of Cambridge, who after the death of her first husband married to Richard Cox, Bishop of Ely, and in her second widowhood did, in memory of her first husband, Dr. Turner, leave to Pembroke Hall, in Cambridge, of which he had been Fellow, an annuity of five merks, and some pasture lands in Knapwell."

John Bale, the early literary historian, and Bishop of Ossory, writes very forcibly in praise of our author. For example, he affirms that he was nowhere branded with the anti-Christian mark, (*nusquam characterizatus, hoc est, nec rasus, nec unctus, quod auditu fit rarissimum,*) "he had never received the tonsure, and was not consecrated to be a priest." Hence it may be inferred

* From Nichol's ed., 4to, 1811. Nuttall's ed. is word for word like Nichol's.

† Tanner adds to Wood's account,—"vel in ecclesia Crutched Friars (Strype, in vita Parker)."

that this gave a handle to Anthony Wood, who reproaches him for undertaking the office of a preacher without authority. Possibly he received deacon's orders at Cambridge, and so was authorized to preach.

In Bale there is the following list of Turner's works:—

De Naturis Herbarum.
In Catonis Distica Moralia.
Sententiarum Flores ex Variis.
Ad Unionem Dissidentium.
De Arte Memorativa.
In Publij Mimi Versiculos.
Pro Insequenda Romana Vulpe.
Contra Wintoniensis Technas.
De Missa Papistica.
De Hierosolymorum Excidio.
Epigrammata Diversa.
Prudens admodum, et si quid.
Causa, candide Lector, initi labo.
Difficilia quæ Pulchra, etc.
Non est ignotum tuæ dominationi.
Quamvis tam veteres illi Philo.
Alienum est omne quicquid oper.
Licet ab ipsa pueritia fuerim.
Haud est tuæ Majestati Illustriss.

Mackenzie, in his 'View of Northumberland,' states that Dr. Turner was elected Fellow of Pembroke College in 1531; but Dr. Pulteney's account is that he was a student of that College in 1538. Are there any matriculation-books or rolls of this early date extant in Cambridge University to help to clear up this point? His first work on plants was printed at London, 1538, by John Bydel.* In this tract he describes himself as a very young man, and on the whole writes in a humbler style than that which would naturally be expected in an author who had been seven years a Fellow of a College.

* "Libellus de re herbaria novus, in quo herbarum aliquot nomina Græca, Latina, et Anglica habes, una cum nominibus officinarum, in gratiam studiosæ juventutis nunc primum in lucem editus." Or, in English, 'A New Book on Plants, with their Greek, Latin, and English Names, Officinal Uses, etc., for Junior Botanists.' In an address to the reader, printed on the back of the titlepage, he notices that it may be justly wondered why a beardless youth like himself, very slenderly skilled in the science of medicine, should venture to publish a work on botany, while he was aware that there were so many persons in the country better acquainted with the subject than himself.

The following are specimens of this very interesting tract, which is in quarto, and is contained in two sheets and a half, or ten folios:—

"*Viscum Angli vocant* Mysceltyne, *aut* Myscelto (called in English Mysceltine or Myscelto). Densissimus iste frutex nusquam nisi in arboribus nascitur; e terra nunquam pervenit. Viscum tot sæcula Anglis ignotum fuisse demiror, quum in pyris et malis sylvestribus nusquam non proveniat."

"This very bushy shrub grows nowhere but on trees, never on the ground; and

Our author's work, 'Historia de Naturis Herbarum Scholiis et Notis Vallata,' may be the work entered first in Bale's list, see *ante*. Pulteney is probably mistaken in suspecting that Bumaldus is the only author who notices this treatise. He is certainly so in stating that this is Turner's first botanical work: see below.

The 'Libellus de Re Herbaria' was printed at London, 1538; the 'Historia de Naturis Herbarum' was printed at Cologne, in 1544.

There is a fuller account of our author's literary labours in Bishop Tanner's 'Bibliotheca;' and the following list is partly derived from A. Wood and partly from Tanner:—

The Hunting of the Romish Fox, which more than 7 years hath been hid among the Bishops of England, etc. Basil, 1543.

A History of Birds, from Pliny. In Latin. Colon. 1544.

Rescuing of the Romish Fox, etc. 1545.

Hunting of the Romish Wolf. (Pro Insequenda Romana Vulpe. Bale.)

Dialogue Containing an Examination of the Mass, etc. (De Missa Papistica. Bale.)

New Herball. (De Naturis Herbarum. Bale?)

A Preservative or Triacle against the Poison of Pelagius. 1551.

A New Book of Spiritual Physic. 1555.*

A Book of the Nature and Properties of the Baths of England, etc.

A Treatise of the Bath at Bath.

it is singular that it should have been unobserved for so many ages in England, where it abounds everywhere on apple and pear trees."

"*Mercury vocatur; ejus duo sunt genera, mascula et famina. Mascula haud temere apud nos reperitur; vidi tamen Cantabrigiæ, in horto aulæ regiæ,*" etc.

"There are two sorts of Mercury, the male and the female. The latter is unfrequent in our country; but I have seen it in the gardens of King's College, Cambridge."

"*Lupus salictarius, officinis dicitur lupulus.*" In officinal language, *Lupulus*; and in English, Hoppes."

"In the shops the Daisy is called the lesser Consolida; in the language of the country a Daisy. In Northumberland we call that a Daisy which has a purple flower and is raised in gardens; the flower we call a Banwort."

The imprint of this rare tract is "Londoni apud ioannem Bydellum, anno dni. 1538."

* In his preface to this work he relates the following:—"When as of late yeares I practised bodely phisick in England, in my Lorde of Sumersette's house, divers sick beggars came unto me, and not knowing that I was a phisician, asked of me myne almose. To whom I offered to heale their diseases for Godde's sake. But they went by and by awaye from me and would none of that."

The Nature of Waters.
The Nature of Wines.
The Nature and Virtue of Triacle.
The rare Treasure of English Baths.
Unio Dissidentium, containing the Agreement of the Doctors with Scripture, and also of the Doctors with Themselves. Dedicated to Domino Wentworth.

Another work or tract is entitled,—

The Comparison of the Old Learning and the New.

Tanner writes that William Turner was ordained a priest by Ridley, also that about the same time the University of Oxford conferred on him the degree of M.D., on his appointment to the office of Physician to the Duke of Somerset.

In his Grace's house at Syon he wrote his Epistola prefixed to his little book 'De Nominibus Herbarum.'*

Previous to his receiving these honours and preferments, or soon after his return from exile, on the accession of Edward VI., he had been promoted to a prebendship (Botevant) in York-Minster, also to a canonry in Windsor, and to the Deanery of Wilts in 1550.

Soon after this period, viz. in 1551, Dr. Turner published his most important work, viz. his 'Herbal,' which was dedicated to his patron, Edward, Duke of Somerset, and was printed by "Stuen Myerdman, and soolde in Paule's Churchyard, at the sygne of the Sprede Egle, by John Gybkin."

This, which is the first edition of the first part, contains title, prologue (two leaves or folios), ninety folios, and table of contents. The obverse side or page of the last leaf is blank.

His zealous advocacy of the principles of the Reformation, or of the new doctrines, as they were then called, rendered England an unsafe abode during Mary's reign, and he again went into voluntary exile. The second part of his 'Herbal' was printed at Cologne; hence it is probable that during his sojourn on the Continent he resided near this city. This part is dedicated to Sir Thomas Wentworth, Lord Wentworth, and was printed by Arnold Birckman, 1562.

* In 1548 Dr. Turner published a small volume, entitled, 'Names of Herbes in Greke, Latyn, Englyshe, Duche, and Frenshe,' 12mo, London.

This work is not mentioned by the literary historians above quoted. It is described by Pulteney, vol. i. p. 64.

When Queen Mary died, he returned to his native country, and was reinstated in all his Church preferments. The third part of the 'Herbal' was printed by the same printer in 1566, and has the following title:—'The Thirde Parte of Wm. Turner's Herball, contayning the Herbes, Rootes, and Fruytes whereof is no mention made of *Dioscorides*, *Galene*, *Plinye*, and other olde authors. Imprinted at Collen, by Arnold Birckman, in the year of our Lord 1566.' The dedication is to the Company of Surgeons, and is dated from Wells, June 24th, 1564.

In 1568 all the three parts were reprinted at Cologne, in black-letter, with a dedication to Queen Elizabeth. This was the year of the author's death.*

There are several reasons why the first rank, the most honourable place, should, among the early botanists of England, be assigned to Dr. Wm. Turner; for, first, his knowledge was multifarious, not merely as a naturalist, but as a scholar; secondly, he was a good philologist, being well acquainted with the languages of Greece and Rome, in which all science at that period was communicated, and, besides this accomplishment, common to all learned men, he was well acquainted with German, which was then called Dutch, as it still is in Germany, and also with French, Italian, and English; thirdly, he condescended to write his 'Herbal' in our vernacular, in a language scouted by the learned at this early period; fourthly, to his extensive knowledge of plants he added something still more useful and attractive, a

* Hodgeson, as quoted above, gives the following honourable testimony to the merits of Dr. Turner:—"William Turner, M.D., a native of Morpeth, is a character whom I wish from the first to introduce to my readers as one entitled to high consideration for his learning and labours. No one will dispute the competency of Conrad Gesner to pronounce judgment on the scholars and natural historians of his time; and he, in the preface to his History of Birds, printed in 1555, has said that before himself a few in modern times had briefly written on the names and natures of birds, among whom Gyb. Longolius, a German, and William Turner, an Englishman, were both men of the greatest learning and deserving of the highest praise." Also, in his book 'De Herbis Lunariis,' he says,—"About fifteen years since, Turner, an Englishman, returning out of Italy, paid me a visit, and I found him a man of such excellent learning, both in medicine and most other sciences, that I can scarcely mention such another."

William Harrison, another contemporary of Dr. Turner's, in his 'Historica Descriptio Britanniæ,' under "Bath," calls him "Dr. Turner, the father of English physicke," and in another place "the famous clerk, Doctor Turner."

"Turner," says Dr. Merrett, in his 'Pinax,' "was the most indefatigable man of his age, and published a book on birds, little in size but great in value."

feeling for and a sympathy with suffering humanity; and he wrote his 'Herbal' not to show the extent and variety of his acquirements, nor principally that he might contribute to the enlightenment of his contemporaries and posterity, but he laboured with a more charitable intention, viz. with the view of alleviating the ailments incident to the sinful and mortal condition of humanity.

In his preface he very forcibly apologizes for the language he employs, and asks "whether it were better that many men should be killed through the apothecary's ignorance of Latin, or that the herball should be set forth in English?" And again, he says, "Whether it were better that the surgeons should kill men for lack of knowledge of herbs, or that an *herball* should be set out into them in English, which for the most part understand no Latin at all, saving such as no Latin ears can abide?" (See Dedication, fol. 2.) These are pertinent questions, and the man who had the moral courage to contravene the conventionalities of his age deserves to be ranked among the prominent advocates of human progress.

Dr. Turner's erudition, judgment, industry, observation, and experience, were universally acknowledged by his contemporaries, but the honour which they paid to his meritorious abilities was too much like the cold tribute rendered to honesty, if we may credit the Latin moralist, who casts a little of the salt of satire into his moral hash: "*Probitas laudatur et alget*" (honesty is praised, and, shivering with cold, it starves).

Lobel, the contemporary of Turner, writes in his 'Adversaria,' p. 93, ed. 1756, eight years after the Doctor's decease, that he had seeds of *Crambe maritima* from him, "cujus semina jam diu medicus Anglus hac parte exercitatissimus, Turnerus nos donârat eamque monocaulum et μονοσπερμον vocandam a semine singulari volebat" (and who wished it to be named monocaulis and monospermous from its single seed). On referring to Turner's 'Herbal' we cannot find this account, which Lobel probably quoted from memory, without reference either to the 'Herbal' or to the communication. The Dover Cole will be subsequently noticed. Lobel, in his congratulatory epistle to John Gerard on the accomplishment of the great work of the last-mentioned author, gives Turner a place among his botanical worthies, *Matthiolus* Dodonæus, Turnerus, Clusius, etc. Gerard

mentions in his epistle to his "courteous and well-willing readers the excellent worke of Master Doctor Turner."

In John Parkinson's notice of his predecessors, Turner's name does not appear. Johnson, the learned editor of Gerard, gives the following testimony to the merits of this great botanist:—

"Let me now at last looke home, and see who we haue had that haue taken pains in this kinde. The first that I finde worthy of mention is Dr. William Turner, the first of whose works that I haue seene was a little booke of the names of herbes, in Greek, Latine, English, Dutch, and French, etc., printed at London, anno 1548. In the yeare 1551 he set forth his Herbal, or History of Plants, where he giues the figures of *Fuchias* for the most part. He giues the names in Latine, Greeke, Dutch, and French. He did not treat of many plants. His method was according to the Latine alphabet. He was a man of good judgment and learning, and well performed wat he took in hand."*

It may be inferred that Turner's 'Herbal' was then, as it still is, a scarce book, and it is hoped that this will be received as an apology for the seeming neglect with which it has been treated by both ancient and modern botanists.†

We will now give an outline of the contents of this primary and most excellent English Herbal, premising this remark, viz. that our object is to elucidate the history of our English native species, rather than to enter upon the great subject of plants in general.

Both Johnson and Pulteney relate that the arrangement of the 'Herbal' is alphabetical, according to the Latin names; but the author does not adhere very strictly to this order; he employs both Greek and Latin names, which are followed by those under which his plants were known in Germany, France, and England; for the first plant on the first page of the first edition (part i.) is *Absinthium*, and the two last are *Agrimony* and *Bean*, *Agrimonia*‡ and *Faba*.

* Johnson's 'Gerard,' Address to the Reader.

† Dr. Pulteney, who devotes about twenty pages of his work to our author, remarks "that the succeeding herbalists, Gerard, Johnson, and Parkinson, seem not to have paid due honour to his merit and learning;" and subsequently states that "in justice to Turner they should have noticed all the plants he has recorded, particularly the natives of England."

"Ray," he further relates, "at the distance of nearly a century, was sensible of his worth, having styled him a man of solid erudition and judgment" (Pulteney's Sketches, vol. i. p. 76). See Raii Hist. Plantarum generalis, in explicatione nom. abbreviaturum, etc.

‡ He employs the Greek name Eupatoria for *Agrimony*. This uncertainty about

The index, or register, which is on the recto side of the last leaf, is alphabetical according to the English names, and the number is nearly one hundred and seventy.

The localities noticed in England are chiefly Northumberland, his native county; Cambridge, where he was educated; Dover, by which he went to the Continent; Sion House, Isleworth, and Richmond; and Somersetshire, where he was chiefly domiciled after his last return to his native country. The continental localities are chiefly Bonn, on the Rhine, Worms, Basle, and several parts in the north of Italy.

The second part begins with *Fagus* and ends with *Xanthium* and *Xyris*, and here, as in the first part, the names are alphabetically arranged. The number in both parts, with the additions made in the third part, is about three hundred. This last part of the work is dated from "Welles, June 24th, 1564," and dedicated to the Company of Surgeons, to whom he apologizes for its imperfections thus:—"Being so much vexed with sickness, and occupied with preaching and the studye of divinitie and exercise of discipline, I have hadde but small leisure to write Herballes."

Turner, according to Pulteney, "is the first author who has given a figure of the Lucern, which he first brought into England, and named *Horned Clover*. He treats largely of its cultivation from Pliny, Palladius, and Columella."

Dr. William Turner's merits as an English botanist will be better understood, and the amount of our obligations to him will be more precisely known, when his labours in this department of the science can be compared with those of his predecessors, his contemporaries, and his immediate successors. This part of the general subject will constitute the matter of a subsequent chapter. For the present our account is limited to the British plants and their localities, which were first, as far as is known to us, described and published as indigenous, native, or spontaneous productions.

The number of English plants described in Turner's 'Herbal' is upwards of three hundred, about one-third of those enumerated in Ray's 'Catalogue of the Plants of England,' and barely one-sixth of the species now generally believed to be of spontaneous

the names, *i. e.* Greek or Latin, causes much trouble to the students of Turner's 'Herbal.' But the students, or even readers, of this excellent work are not numerous.

British growth. The following is an account of our author's discoveries,—for all his plants may be deemed such, as no one before him described the localities or the plants, and few did so much as name them, as native productions.

As has been hinted above, Wm. Turner's English plants may be arranged in four classes, viz.:—1st. Plants of Northumberland and its vicinity. 2nd. Cambridge and the contiguous counties. 3rd. Middlesex, Surrey, and Kent. 4th. Somersetshire, etc.

The Northumberland plants specially recorded by Dr. Turner (his own order is followed) are the following:—

1. ARTEMISIA MARINA. "Sea Wormwood. In oure tyme it is plenteously founde in England, about Lynne and Holly Ilond (Holy Island), in Northumberland," etc. (Pt. i. fol. 1.)

2. PARIS QUADRIFOLIA. "(One berrye.) The herbe that hath bene taken for lyberdes bayne, groweth plentuously besyde Morpeth, in Northumberland, in a wod called Cottying Wod." (Pt. i. fol. 4.)

3. SCILLA NUTANS. This, which our author calls "*Hiacinthus*, is commen in Englande, though it be not of the beste, and it is called Crow towes, crow fote, and crow tese. The boyes in Northumberlande scrape the roote of the herbe, and glew theyr arrowes and bokes wyth that slyme that they scrape of."

4. BELLIS PERENNIS. "In Northumberlande men call thys herbe a banwurt, because it helpeth bones to knyt againe." (Pt. i. fol. 31.)

5. HELLEBORUS VIRIDIS. Syterwurt. "When I came in to Englande, I dyd hear that dyuerse husband men whyte (with) whome I spake vsed (used) to put the roote of berefoot into beastes eares, and called the puttynge in of it syterynge of beastes, and in sume place called the herbe syter wurte." (Pt. i. fol. 64, 65.) "I haue seen both the kyndes in Englande: the one kynde in gardynes whyche is wylde in Germany; and the other kynde with the broader leaffe whyche is onely in gardynes in Germany (as farre as I could perceyue) in Northumberlande in the weste parke besyde Morpeth, a good stone cast from the water syde in the syde of the hylle." (Pt. i. fol. 65.) "I holde that a man for defaut of it (*H. niger*) may use that kynde of Berefote that goeth every year into the ground (*H. viridis*), whereof groweth greate plentye in a parke besyde Colchester, and in the west parke besyde Morpeth, a little from the river called Wanspeck." (Pt. ii. fol. 160.)

6. ERICA. "The hyest hethe that euer I saw groweth in Northumberland, which is so hyghe that a man may hyde hymself in." (Pt. i. fol. 85.)

7. JUNIPER. "In England it groweth most plentuouslye in Kent; it groweth also in the bysshopryche of Durram, and in Northumberlande." (Pt. ii. fol. 25.)

8. LEPIDIUM LATIFOLIUM? In Turner this is named *L. magnum*. "Thys Lepidium that Pliny and Paul describe, groweth plentuously about the water syde that rynneth thorow Morpeth in Northumberland, in suche places as great heapes of stones are casten together with the myght of a great spat or flood." (Pt. ii. fol. 35.)

9. LINUM USITATISSIMUM. "Flax, which is called of the Northern men Lynt, in Duche Flachs, etc., groweth very plentuously also in south parte," etc. (Pt. ii. fol. 39.)

10. MEUM ATHAMANTICUM. "Meu groweth in the bisshoprik of Durram, in wild mores, called felles, and viii. myles aboue Bon (Bonn), in Germany, in a countre called Caltland." (Pt. ii. fol. 57.)

11. OROBANCHE MAJUS? "*Orobanche*, Chokewede (Pt. i. fol. 88), groweth in many places in England, bothe in the Northe countre besyde Morpethe, whereas it is called our Lady of New Chapellis flour,* and also in the south countre, a lytle from Shene, in the broum closes." (Pt. ii. fol. 71.).

12. PETASITES. "Thys herbe is called in Northumbrelande an Eldin, and in Cambridgeshyre a Butterbur, in Duch Pestilenz Wurz."

13. PLANTAGO MAJOR. "The greatest kynde is called in the South parte of Englande Plantayn or grete Plantayn, and in the north countre Waybrede or grete Waybrede." (Pt. ii. fol. 94.)

14. SORBUS AUCUPARIA. "The tre groweth in moyst woddes, and it is called in Northumberlande, a rowne tre or a whitken tre, in the south partes of England, a quicke beame tre." (Pt. ii. fol. 143.)

The plants of Cambridgeshire and neighbouring counties observed and described by Dr. Turner are,—

1. LIGUSTRUM VULGARE. "Pryvet groweth very plentuously in Cambrich shyre in the hedges, and almoste in euery gardin in London." (Pt. ii. fol. 38.)

2. MYRRHIS ODORATA. "It groweth . . . very lyke unto Humlock (Hemlock). I never saw greter plenty of it then I haue seen in the hort-yard (orchard) of Pembroke hall in Cambridge, where as I was som tyme a pore felow." (Pt. ii. fol. 60.)

3. LENTILS. "Lentilles grow in great plenty in Cambridge shyre, and all throw Germany, where as they are husked and used for a meat." (Pt. ii. fol. 33.)

* "Thys herbe is called about Morpeth in Northumberland, new-chappell floure: because it grewe in a chappel there in a place called Bottell Bankes, where as the unlearned people dyd worshyppe the Image of synt Mary, and reckened that the herbe grewe in that place by the virtue of that Image." (Fol. 88.)

4. Sambucus Ebulus. "Walwurt groweth mych about Cambridge." (Pt. i. fol. 83.) "I have marked in our Englyshe ebulo in Cambryge shyre that the stalk was round and not foure square." (Pt. i. fol. 58.)

5. Petasites. "This herbe is called in Northumberland an Eldin, in Cambridge shyre a Butterbur." (Pt. ii. fol. 83.)

6. Hordeum murinum. "The way bent (way bennet) hath a leafe like grasse, and groweth plentuously in Cambridgeshire about highe ways." (Pt. ii. fol. 17.)

7. Ononis arvensis? (spinosa). "In Cambryge shyre this herb is called a whyne but I put pety to it to make dyfference betwene thys herbe, and a fur, whyche in manye places in Englande is also called a Whyne." (Pt. i. fol. 18.)

8. Pyrus communis. "*Pyra superba*, that is to say, prowde peares, are lytle and sonest rype, and these are called, in Cambridge, Midsummer peares." (Pt. ii. fol. 108.)

9. Euonymus europæus. "Spyndell tree. Althoughe I haue seen this tree oft tymes in Englande, and in moste plenty betwene Ware and Barkway, yet for all that I never could learne an Englyshe name for it." (Pt. i. fol. 89.)

10. Teucrium Scordium. Water Germander. "*Scordium* groweth in Oxfordshyre and in Cambridge shyre in good plenty." (Pt. i. fol. 130.)

The following plants, localized in Turner's 'Herbal,' are some of those growing in the south-eastern shires of England:—

1. Tragopogon minor? "Gotes bearde. Let us rede as Theophrastus doth: Out of the top cummeth a hore whyte bearde, wherupon it is called gotes bearde: thes be the wordes of Theophrastus. The herbe whiche we cal gotes bearde in barune places hath but a short stalke, but in gardines and in ranke meddos it hath a longe stalke, and full of ioyntes like knees. About London I haue sene in the feld thys herbe wyth a swete roote and wyth blake sede and a yelow floure, and after the floure is gone, with a great dele of longe whyte doune lyke tuftes of whyte here, but about Colon (Cologne) I saw it whyche had whyte sede and a bytter roote, all full of mylke, as in other places it doth appere." (Pt. i. fol. 31.)

2. Hypericum calycinum? (hircinum?) "Greate Saint Johnes wurte. I haue sene it dyuerse tymes in Syon parke." (Pt. i. fol. 16.)

3. Anemone Pulsatilla. "It groweth in greate plenty aboute Bon (Bonn) in Germanye, and about Oxforde in Englande, as my frend Falconer tould me." (Pt. i. fol. 17.)

4. Anthemis nobilis. "Chamomyle. This herbe is scarce in Germany, but in England it is so plentuous that it groweth not only in gardynes, but also viii. myle aboue London it groweth in the wylde felde,

in Rychmonde Grene, in Brantfurde Grene, and, in mooste plenty of al, in Hunsley Hethe." (Pt. i. fol. 18, 19.)

5. AVENA SATIVA? "Ther is another kinde of otes, called pill otes, which growe in Sussex; it hath no husk abydyng upon it, after that it is threshed and is lyke otemele (oatmeal)." (Pt. i. fol. 29.)

6. MYRICA GALE. "There is a shorte bushe that groweth in the fenne called in Duche Gagel, in Cambridgeshyre Gall, and in Summersetshyre Goul or Golle." (Pt. iii. fol. 47.)

7. VERONICA SERPYLLIFOLIA. "Paulis betoni. Thys herbe groweth in Syon gardyn, and in dyuerse woddes not far from Syon, wyth a whyte floure myxed with blewe, and wyth a sede lyke unto bursa-pastoris." (Pt. i. fol. 34.)

8. BRASSICA OLERACEA and CRAMBE MARITIMA. "There are yit ii. kyndes of wyld cole, wheroff I fynd no mencion in any wryter. The one is a wonderful great cole, and hath leues thrise as thike as euer I saw any other cole haue. It hath whyte floures, and round berryes, like yuy (ivy), where in the sede is conteyned."

B. OLERACEA. "I neuer saw it in all my lyfe, sauyng in Douer clyffes. This is myche lyke the other cole; but it is whyter, and rougher, and bytter with all." (Pt. i. fol. 37.) "This herbe groweth at Douer (Dover), harde by the see syde. The other kynde of wyld cole groweth euer by water sydes, with a leafe indentyd, as rokket is: in taste, smelle, fasshione, floure, and sede, lyke unto the gardyne cole; of thes I name in Latyne *brassicam dobricam*, in Englyshe Douer cole: because I found it fyrst besyde Douer. The secund kynde I cal *brassicam fluviatilem*, and in English waterkole, because it groweth euer by water sides." (Pt. i. fol. 37.)

9. ALNUS BETULA. "Byrche is called in Latin *betula*. I haue not red of any vertue that it hath in physik: howbeit it serueth for many good uses, and for none better then for betynge of stubborne boyes, that ether lye or wyll not learne." (Fol. 34.)

10. CALAMINTHA CLINOPODIUM. "Horse tyme. I founde thys herbe ryght ouer against Syon." (Pt. i. fol. 60.)

11. PLANTAGO CORONOPUS. "Herbe ivy or crow foote plantne. Theodor Gaza calleth it *siligo*. It groweth much aboute Shene in the hygh waye, and aboute the sea syde in the banks whych are made by man's hand." (Pt. i. fol. 67.)

12. CRITHMUM MARITIMUM. "Sampere. It groweth plentously besyde Douer and in Susexe by the sea syde." (Pt. i. fol. 68.)

13. HIERACIUM VULGATUM? (BOREALE). "Hawke wede. I have sene this in greate plenty bothe in Englande and in Germany, in the fields about Bonne, in Englande in the medowe a lytle from Shene."

14. MENTHA PULEGIUM. "Penny ryal groweth much, without any settyng, besyde Hundsley (Hounslow), upon the heth besyde a watery

place, . . . in such pooles as ar full of water in wynter, and ar dryed up in sommer." (Pt. ii. fol. 107.)

15. CASTANEA. "Chesnut (Chestnut) trees growe plentuouslye in Kent abrode, in the feldes, and in many gardynes in England." (Pt. i. fol. 47.)

The following are the plants observed and localized by our author in the west:—

1. ALLIUM VINEALE. "Crowe garlyke or wyld garlyke. This groweth in myddes (meadows) and fields in every cuntre."

2. ALLIUM URSINUM. "Rammes or ramseyes groweth in woods about Bath." (Pt. i. fol. 7, 8.)

3. "HYSSOP? We have in Sumershire besyde the commen hyssop that groweth in all other places of Englande, a kinde of hyssop that is al roughe and hory (hoary), and it is greter muche and stronger then is the commen Hyssop. Som call it roughe hyssop."

4. COLCHICUM. "I have sene it growe in the west cuntre (country) besyde Bathe." (Fol. 62.)

5. SMYRNIUM OLUSATRUM. "Our Alexander groweth in moyste places, and in Ilandes, compassed about the se, as in a certayne Ilande betwene the far parte of Sommersetshere and Wales. . . . It groweth in every shyre of England in plenty." (Pt. ii. fol. 68.)

6. PEUCEDANUM OFFICINALE. "Harstrang. I hear say that it groweth in England, and I founde a roote of it at Saynt Vincentis rock, a lytle from Bristow." (Pt. ii. fol. 83, 84.)

7. PRUNUS INSITITIA. "Bulles tre. I never saw in all my lyfe more plentye of this sorte of Bulles trees then in Somersetshyre." (Pt. ii. fol. 104.)

8. ASPLENIUM CETERACH. "Groweth also in England, about Bristow." (Pt. i. fol. 27.)

9. CONVOLVULUS SOLDANELLA, *Brassica marina*, Soldanell. "I have not sene it in England sauying only besyde Porbek. Howbeit, I thynke verely, that it is in other places, in great plentye." (Pt. i. fol. 37.)

10. HALIMUS PORTULACOIDES? Sea Purslane (Purcelline). "I found the same herbe of late besyde Ile of Porbek." (Pt. i. fol. 50.)

11. ANCHUSA OFFICINALIS? Red Buglosh. (Pt. i. p. 15.) "Thys herbe is called in some places of Englande cattys tayles, in other places wylde buglose; it groweth in grauylly and sandy places, and in pyttes, wher as grauell is dygged out of." (Fol. 16.)

12. COTYLEDON UMBILICUS. Wall pennye grass. "Thys herbe groweth in Welles (Wells) and divers places in Summersetshyre in more plentye than ever I saw it in anye other place all my lyfe. I call it pennye grasse, to put a difference betweene it and the sheepe killinge pennye grasse that groweth in merishe and waterye groundes." (Pt. ii. fol. 169.)

13. BUPLEURUM PERFOLIATUM. Throw Wax. "I have sene this in great plenty in a corn field on the northe side of the citye of Wormis in Germanye, and in no less quantitye in Somersetshyre, between Sommerton and Marlocke."

The following are a few of Dr. Turner's plants which have no particular locality entered, but he gives their habitats (place where they are generally found).

The Doctor gives the following description of the virulent property of

1. ACONITUM NAPELLUS. "And thys wolfbane of all poysones is the most hastye poison. Howbeit, Plini saith, that this herbe is good to be dronken against the bytyng of a scorpyone. Thys is also the nature of wolfes bayne, if anye credence may be gyuen unto Plini, that it will kyll a man if he take it, excepte it fynde in a man some thyng y^{t} it may kyll; with that it wyll stryue as with hys mache, which it hath founde within the man." (Pt. i. fol. 5.)

2. ASPARAGUS "groweth in diverse gardins in England, and in sume places by the sea side, in sandy hilles." (Pt. i. fol. 27.)

3. ANAGALLIS ARVENSIS. Pympernell. "The male pympernell groweth commonlye in England in the corne and in tylled groundes, and so doth the female growe in Germanye about Bon (Bonn) and Colon." (Fol. 15.)

4. ASARUM EUROPÆUM. Folefote. "Folfoote groweth only in gardynes in Englande; but it groweth wylde in certayne places of Germanye." (Pt. i. fol. 25.)

5. CYCLAMEN HEDERÆFOLIUM. Sowesbrede. "I haue not seen it in Englande, wherefore I knowe no usuall name for it; but least it shuld be nameless, if it ether shuld be brought into England, or be founde in any place in England, I name it Sowesbrede, or rape violet, and the roote is lyke a rape." (Fol. 75.)

6. VINCA MINOR. Perwynckle. "Perwyncle groweth wild in many places of Germany, and it groweth plentuously in Englande in gardynes, and wylde also in the west cuntre." (Pt. i. p. 59.)

7. CORIANDRUM SATIVUM. "The leues (leaves) are wonderfull and stynkynge when they ar grene, the stalke is a cubytt and a halfe of hygh, full of lytle branches, the floures are white, and the sede is round and bare, and when it is drye, it is of a good sauoure and a good taste." (Pt. i. fol. 66.)

8. DIPSACUS SYLVESTRIS and D. FULLONUM. "The wylde tasel groweth commonly aboute diches and watery places; in the begynnyng of wynter the golde finches use mych to haunt this herbe, for the sedes sake, wher of they are very desyrus; the other groweth in gardines." (Fol. 82.)

9. Isatis tinctoria. *Glastum* or *Wadde*. "The wylde kynde groweth not in England that I know, sauynge onlye in gardens, but it groweth plenteouslye wythout anye sowynge in High Germany, by the Renes (Rhine's) syde." (Pt. ii. fol. 11.)

10. Iris. "I haue sene a litle flour de lice growyng wylde in Dorset shyre, but hole cartes full in Germany, besyde Wormis, in the middowes, not far from the Rhene." (Pt. ii. fol. 23.)

11. Mespilus. Medlar. "The second kinde is that is comen in Itali, Germani, and England, and is comenly called a medler." (Pt. ii. fol. 56.)

12. Oxalis Acetosella. Wod sour (Wood Sorrel). "And it can not be *Lotus urbana* (*O. corniculata*), because it groweth alwaies wilde in the woddes, and commonly about tre rootes. We gather that thys Alleleluya or Wodsour shoulde be Oxys, in Pliny." (Pt. ii. fol. 74.)

13. Rubia peregrina. Madder. "Rubia groweth in Germany, and also in Englande. And the moste that ever I sawe is in the Yle of Wyght. But the farest and gretest that ewer I sawe groweth in the lane besyde Wynchestre in the way to Southampton." (Pt. ii. fol. 118.)

Here follows a List of the British Plants, or most of those described in Dr. Turner's 'Herbal,' with his names, and the parts and folios (leaves) of his work where they are to be found.

Note.—The *first* is the common scientific name, the *second* is the ancient name; *p.* means part, *f.* folio or page.

Achillea Ptarmica, p. 2, 106.
Aconitum Napellus, p. 2, f. 4.
Acorus Calamus, p. 1, f. 5.
Adiantum Capillus-Veneris, p. 1, f. 6.
Agarick, p. 2, f. 29, 30, 31.
Agrimonia Eupatoria, p. 1, f. 90; p. 3, f. 28.
Agrostemma Githago, p. 1, f. 41.
Ajuga Chamæpitys: Grounde Pyne, p. 1, f. 53.
Alchemilla: Ladies' Mantell, p. 3, f. 23.
Alder. *See* Betula Alnus, p. 1, f. 34.
Alliaria: Sauce Alone, p. 3, f. 1.
Alisma Plantago, p. 2, f. 94, 95.
Allium Schœnoprasum, A. ursinum, A. vineale, p. 1, f. 78.
Althæa officinalis: Marrische Mallowe, p. 1, f. 11.
Amaranthus Blitum, p. 1, f. 35.
Amaradulcis: Bitter Swete, p. 3, f. 2.
Anagallis arvensis, A. cœrulea: Pympernell male, P. female, p. 1, f. 15.
Anchusa, Anagyris, p. 1, f. 15, 16.—Not of English growth.
Anemone nemorosa, A. Pulsatilla, p. 1, f. 17.
Angelica sativa, A. sylvestris, p. 3, f. 5.
Anthemis nobilis: Camomyle, p. 1, f. 18.
Antirrhinum Orontium: Calfes Snowte, p. 1, f. 18.
Apium: (Celery,) Smallage, p. 1, f. 18.
Arbutus Unedo: Strawbery tre, p. 1, f. 22.
Aristolochia Clematitis: Rounde Byrtheworte, p. 1, f. 23.
Artemisia Absinthium: Comen Wormwode, p. 1, f. 2. A. marina: Sea Wormwode, p. 1, f. 1. A. vulgaris: Mugwyrt.
Arum maculatum: Cockoupynt, p. 1, f. 24.
Asarum europæum: Folfot (Foalfoot), p. 1, 26.

Ash. *See* Fraxinus and Ornus, p. 2, f. 71, 143.

Asparagus: Sperage, p. 1, f. 27.—In gardens and by the sea.

Asperula odorata: Wode Rose or Wode Rowell, p. 3, f. 25.

Asplenium Ceterach, p. 1, f. 27. Asp. Trichomanes: Maydenshere, p. 2, f. 157.

Atriplex hastata: Oreche, p. 1, f. 29.

Atropa belladonna: Nyghte shad, p. 2, f. 142.

Aquilegia: Columbine, p. 3, f. 6, 7.

Avena sativa: Pilotes, p. 1, f. 29.

Ballota nigra: Stynkynge Horehounde, p. 1, f. 30.

Betonica. *See* Stachys, p. 1, f. 33.

Beech. *See* Fagus, p. 2, f. 1.

Bellis perennis: Dasey, p. 1, f. 31.

Beta maritima: Bete, p. 1, f. 32.

Betula Alnus: Alder-tre, p. 1, f. 8.—Water sydes, etc.

Betula alba: Byrch, p. 1, f. 34.

Borago, p. 1, f. 39.

Botrychium Lunaria, p. 3, f. 53.

Brassica oleracea, B. campestris?: See Cole, p. 1, f. 36; Water Kole, p. 1, f. 37.

Bryonia dioica: Brionye, p. 2, f. 166, 167.

Bursa-pastoris, p. 3, f. 14, 15.

Bunium Bulbocastanum: Erath (earth) nut, p. 1, f. 20.

Buxus: Boxe, p. 1, f. 40.—Groweth not of itself (is not spontaneous) in England.

Calamintha Clinopodium, Nepeta Cataria: Catmynt, p. 1, f. 41.

Calamintha Acinos?, Clinopodium?, p. 1, f. 60.

Caltha palustris: Lukken Gollande, p. 1, f. 52.

Cannabis: Hempe, p. 1, f. 42.

Carduus benedictus, C. pratensis: Thystelles, p. 2, f. 144.

Carduus benedictus, p. 3, f. 18.

Carex: Segge or Shergras, p. 1, f. 46.

Carum: Carawaye, p. 1, f. 45.

Castanea. *See* Fagus, p. 1, f. 47.

Centaurea Cyanus: Blewbottell, p. 1, f. 75.

Chafweede or Cudweed, Cudwort what? p. 1. f. 48.

Cheiranthus Cheiri?: Wall Gelouer, p. 2, f. 163.

Chelidonium majus, p. 2, f. 15; C. minus, *id.*

Chenopodium Botrys, p. 1, f. 35.

Chrysanthemum Leucanthemum, p. 1, f. 31.

Cichorium Intybus, p. 2, f. 21.

Colchicum, p. 1, f. 62.

Conium: Homloke (Hemlock), p. 1, f. 57.

Convolvulus Soldanella, p. 1, f. 37. C. sepium: Withwynde, p. 1, f. 65.—A Lily in whiteness; and it is, as it were, an unperfect worke of Nature learning to make Lilies.

Coriandrum: Coriandre, p. 1, f. 66.

Cornus sanguinea: Cornell tree, p. 1, f. 66.

Corydalis solida: Fumitorye, p. 1, f. 44.

Cotyledon Umbilicus: Wal penyewort, p. 2, f. 169.

Corylus Avellana: Hasell nutt, p. 1, f. 67, 68.

Cowslip, p. 3, f. 80.

Crambe maritima, p. 1, f. 36, 37.

Cratægus Oxyacantha: Hawthorn tre, p. 2, f. 73.—Glastenbury Thorn, p. 2, f. 73.—In Summersetshyre, about six myles from Welles, in the park of Glassenberry, there is an Hawthorne which is grene all the wynter, as all that dwell there about do steadfastly holde.

Crithmum maritimum: Sampere, p. 1, f. 68.

Cuscuta: Doder, p. 1, f. 46.

Cyclamen hederæfolium: Sowesbrede, p. 1, f. 75.—Not known as spontaneous in England at this period.

Cynoglossum officinale and C. sylvaticum: Doggistonge, p. 1, f. 76.

Cyperus longus: Golangal, p. 1, f. 77.

Daphne Laureola: Lowry or Lauriel, p. 1, f. 79.

Daucus: Carrot? or Parsnep?, p. 1, f. 80; p. 2, f. 80.
Dianthus: several undetermined, p. 1, f. 43.
Dianthus deltoides: Wylde Gelouer (Maiden's Pink), p. 1, f. 43.
Digitalis: Foxegloue, p. 3, f. 17.
Dipsacus fullonum, D. sylvestris: Gardin and Wylde Tasel, p. 1, f. 82.
Drosera rotundifolia, p. 3, f. 79.
Docks, many; Sorrel, both, f. 121.
Echium vulgare: Wylde Buglose, p. 1, f. 16.
Epilobium angustifolium, E. hirsutum, E. parviflorum: Herb Willow, p. 2, f. 44.
Epimedium alpinum, p. 1, f. 89.
Erica: Heth, p. 1, f. 85.
Eryngium maritimum: Sea Holly, p. 1, f. 87.
Erythræa Centaurium: Centory, p. 1, f. 48.
Euonymus europæus: Spyndell tree, p. 1, f. 89.
Eupatorium cannabinum, p. 3, f. 29.
Euphorbia amygdaloides: Wode Spurge (Sion Parke), p. 2, f. 154; E. helioscopia, E. Lathyris, p. 2, f. 31.
Euphorbia Paralias, E. Peplis, p. 2, f. 81. E. Portlandica?
Euphrasia: Eyebright, p. 3, f. 29.
Fagus: Beche, p. 2, f. 1.
Fagus Castanea, p. 1, f. 47.
Ficaria ranunculoides, p. 2, f. 15.
Filago germanicum, p. 2, f. 11.
Fœniculum: Fenel or Fenkle, p. 2, f. 5.
Fragaria vesca; Strawberye, p. 2, f. 6.
Fumaria officinalis, p. 1, f. 44.
Gagea lutea: Wylde Leke, p. 1, f. 40.—Lobel says, Adv. 56, "Anglice nemorosis Sommerseti Ornithogalum luteum collegimus."
Galanthus?, p. 2, f. 62.
Galeopsis Tetrahit?
Galium Aparine: Goosharethe or Clyver, p. 1, f. 20. G. cruciatum: Mayden's Heire, p. 2, f. 6.
Genista: Broume, p. 2, f. 7.
Gentian, p. 3, f. 25.
Geranium and Erodium: Pink nedle Cranesbill, p. 2, f. 8.—Our author names only *G. molle* and *E. cicutarium*; but he gives six figures, numbered Geranium one, two, three, etc., respectively.
Geum urbanum: Avenes, p. 2, f. 9.
Geum urbanum?, Cariophyllata sylvestris: Cloues, p. 3, f. 22, 23.
Glaucium luteum: Horned Poppy, p. 2, f. 78.—Thys groweth very plentuously about the see syde, in Englande, bothe besyde Douer and also in Dorsetshyre.
Glaux. *See* Trefoly, p. 2, f. 12.
Gnaphalium? sp., p. 1, f. 48.—Centunculus is called in Yorkshire Cudwede, and in Northumberlande Chafwede.
Gnaphalium germanicum: Cottenwede, p. 2, f. 11.
Hedera Helix, p. 2, f. 87.
Helleborus fœtidus, H. viridis: Berefot Syterwurte, p. 1, f. 65.
Heracleum: Kowe Parsnepe, p. 2, f. 145.
Hesperis matronalis, p. 2, f. 163, 164.
Hieracium vulgare: Hawkwede, p. 2, f. 14.
Hieracium Pilosella, p. 3. f. 58.
Hordeum murinum: Waybent, p. 2, f. 17. H. temulentum: Darnel, p. 1, f. 41.
Holye tre, p. 3, f. 81.
Humulus Lupulus: Hoppes, p. 2, f. 42.
Hyoscyamus: Henbayne, p. 1, f. 10.—Towns and villages by the sea side.
Hypericum Androsæmum: Tutsan, p. 1, f. 16. H. calycinum? or H. hircinum: Grete St. John's Grasse, p. 1, f. 26.
Hypericum perforatum: St. John's Grasse, p. 2, f. 18.
Inula Helenium: Elecampane, p. 2, f. 22.
Inula Conyza?, p. 1, f. 63.
Iris Pseudacorus, p. 2, f. 23.
Isatis tinctoria: Wadde, two kinds,

the garden and the wilde wadde, p. 2, f. 11.

Juniper, p. 2, f. 25.

Knautia: Scabious, p. 3, f. 69.—It y^t^ groweth among the corn, is rankest of all other.

Lactuca —— ?: Lettes, p. 2, f. 25, 26.

Lamium album: Ded Nettel, p. 2, f. 27. L. amplexicaule ?, L. purpureum ?, *id.*

Lappa major: Great Bur, p. 2, f. 82.

Lastrea Filix-mas, p. 2, f. 3.

Lathyrus sylvestris ?, L. tuberosus: Peese Earth Nutt, p. 1, f. 28.

Lathyrus macrorhizus ?: Bitter Fitches, p. 1, f. 86.

Lemna: Ducke's Meat, p. 2, f. 33.

Lepidium, L. latifolium, L. magnum, p. 2, f. 35. L. ruderale: Sciatica or Wylde Cresse, p. 2, f. 20.

Leucojum æstivum, p. 2, f. 163.

Ligustrum: Primprynt, p. 2, f. 37.

Linaria vulgaris: Tode's Flax, p. 2, f. 73.—Thoughe thys herb groweth plentuously in England, I never heard any Englyshe name for it.

Linum usitatissimum: Flax or Lynt, p. 2, f. 39.

Lithospermum officinale, L. arvense: Grummel or Graymile, p. 2, f. 40.

Lolium temulentum: Darnel, p. 1, f. 41.

Lonicera Periclymenum: Woodbynde, p. 2, f. 82.

Lycopodium alpinum ?: Hethe Cipres, p. 1, f. 51.

Lycopodium Selago, and L. clavatum: Chamepeuce, p. 1, f. 52.

Lysimachia Nummularia.—I name it here "herbe two pence;" it groweth in shadowy ditches, etc.

Lysimachia vulgaris, p. 2, f. 44.

Lythrum Salicaria, p. 2, f. 44.

Malva sylvestris, M. rotundifolia: Mallowe, p. 2, f. 44, 45.

Marchantia polymorpha: Liuerwurt, p. 2, f. 36.

Marrubium: Horehounde, p. 2, f. 51.—In places as the bourish Wormwod groweth.

Melittis officinalis, p. 1, f. 21.

Medicago Lupulus, M. sativa: Horned Clover or Medic Fother, p. 2, f. 52.

Melilotus cœrulea ?, p. 2, f. 133.

Mentha arvensis: Corne Mynte, p. 1, f. 41.

Mentha hirsuta, p. 2, f. 140; M. Pulegium, p. 2, f. 106, 107; M. sylvestris, M. viridis, p. 2, f. 53, 54, 55.

Mercurialis perennis, M. annua: Mercury, p. 2, f. 55.

Mespilus: Medler, p. 2, f. 56.

Meum athamanticum: Mew, p. 2, f. 56, 57.—Groweth in the Bishoprick of Durram, in wylde mores called felles.

Monk's Rhubarb, p. 2, f. 121.

Mustard. *See* Sinapis, p. 2, f. 137.

Myrrhis, p. 2, f. 60.

Nasturtium officinale: Sisymbrium, or Cardamine, or Water Cresses, p. 2, f. 140.

Nepeta Cataria: Cat Mynte, p. 1, f. 41.

Nuphar lutea: Nenufar, p. 2, f. 65, 66.

Nymphæa alba: Water Rose or Water Lily, p. 2, f. 65.

One Berrye, p. 3, f. 31; p. 1, f. 4.

Ononis arvensis: Petye Whyne, p. 1, f. 18.

Onopordum Acanthium, p. , f. 3.

Ophioglossum: Adder's Tonge, p. 3, f. 51, 52.

Orchids, several kinds: Adder Grass, p. 2, f. 149.

Origanum, Organ: Marjoram ?, p. 2, f. 69.

Ornithogalum umbellatum, p. 2, f. 70.

Orobanche major: Chokewede, p. 1, f. 88; p. 2, f. 71.

Oxalis Acetosella: Alleluia, p. 1, f. 74. O. corniculata: Lotus Urbana, p. 2, f. 42, 74.—In gardens.

Papaver Argemone, P. dubium ?, P. hybridum, P. Rhœas ?, p. 2, f. 76, 77.

Papaver somniferum: Poppy, p. 2, f. 76, 77.

Parietaria: Pellitore of the Wall, p. 2, f. 14.

Paris quadrifolia: One Berrye, p. 1, f. 4.

Pastinaca: Parsnepe, p. 2, f. 80, 138.

Peare tres at Cambridge, p. 2, f. 108.

Pæonia, p. 1, f. 84.—The female is common thorow all England and Germany, and in diuerse places of England. . . . The male groweth also.

Petasites: Elldocken, p. 2. f. 83.—This herbe is called in Northumberland an Elden, and in Cambridgeshyre a Butter Bur.

Petroselinum: Parsley, p. 1, f. 21.

Peucedanum: Harstrang, p. 2, f. 84.

Phragmites communis: Reede, p. 1, f. 25.

Phalaris canariensis, p. 2, f. 85.

Pimpinella Saxifraga: Rough Saxifrage, p. 1, f. 81.

Pine, p. 2, f. 88, 89.—Not native in England.

Pink. *See* Fuschius, p. 1, f. 67.

Plantago Coronopus, P. lanceolata, P. major: Weybrede or Plantayn, p. 2, f. 94, 95; P. media.

Plantago Psyllium: Flesede, p. 2, f. 105, 106.

Polygala vulgaris: Milke Lentill, p. 1, f. 96.

Polygonatum multiflorum, P. verticillatum: Scala Cœli (heaven's ladder), p. 2, f. 97, 98.

Polygonum Convolvulus?, P. Fagopyrum, P. lapathifolium?, P. aviculare: Knot Grasse, p. 2, f. 97.

Polygonum Hydropiper: Culerage Arssmart, p. 1, f. 68.

Polygonum Fagopyrum: Bukwheat, p. 1, f. 83.

Polygonum Bistorta, p. 3, f. 12, 13.

Polygonum Persicaria, p. 3, f. 61.

Polypodium vulgare, p. 2, f. 4; P. Dryopteris?, p. 1, f. 83.

Populus: Aspe, p. 2, f. 98; Pepler, two sorts, P. alba, and P. nigra?—[Where is *P. tremula?*]

Potentilla comarum, P. reptans, P. Tormentilla?: Cinkfoly, p. 2, f. 110.

Primrose is not in Turner's Herbal? is P. veris?: Porcellayn, p. 2, f. 102.

Prunella vulgaris: Selfe Heale, p. 3, f. 60.

Prunus spinosa, P. domestica, P. insititia: Plum, Slo, Bulles, etc., p. 2, f. 103, 104, 105.

Pteris aquilina: Ferne or Brake, p. 2, f. 3.

Pulicaria vulgaris?, P. dysenterica, p. 1, f. 64.

Pulmonaria angustifolia: Sage of Hierusalem, p. 1, f. 29.

Pyrola rotundifolia: Limonium, p. 2, f. 39.

Pyrethrum Parthenium: Feverfew, p. 2, f. 78, 79.

Pyrus Malus: Appel Tre, p. 2, f. 47. P. communis: Peare, p. 2, f. 108.

Quercus: Oke, p. 2, f. 109.

Raphanus sativum: Radish, Crowfote, p. 1, f. 114; p. 2, f. 111.

Ranunculus sceleratus, R. Flammula, and other species not determined.

Ribes, p. 3, f. 62.

Rosa canina: Brere, p. 2, f. 119. R. rubiginosa: Eglentine, p. 1, f. 77.

Rubia peregrina: Madder, p. 2, f. 118.

Rubus idæus: Bramble, p. 1, f. 118.

Rumex, several: Docke, p. 2, f. 129.

Ruscus aculeatus: Knehull?, p. 2, f. 121.

Salix, two or three sorts, p. 2, f. 125, 126.

Salsola Kali, p. 3, f. 38.

Salvia veronica fœmina, p. 2, f. 126.

Salvia: Clare, p. 2, f. 70.

Sambucus nigra: Elder, Bourtree, p. 2, f. 124. S. Ebulus: Walwurt, p. 1, f. 83.

Sanicula: Sanule, p. 3, f. 66.

Sarothamnus scoparius: Broume, p. 2, f. 7.

Saxifraga?, p. 3, f. 67.

Saxafraga alba (granulata?) p. 3, f. 67. —I have sene of thys kynd in Essexe,

by the see syde. . . . It groweth in diuerse places in England.

Saxifraga granulata, p. 3, f. 10, 11.

Scabiosa succisa: Deuil's Bite, p. 3, f. 42.

Scandix: Pinke Nedle, p. 2, f. 130.

Scilla nutans?, p. 2, f. 27.

Scolopendrium vulgare: Hartstunge, p. 2, f. 86.

Scrophularia aquatica, S. nodosa: Water Betony, Brown Wurt, p. 1, f. 61.

Scutellaria galericulata?

Sedum, species?, p. 2, f. 131.

Sempervivum tectorum: Houseleke, p. 2, f. 131.

Senecio vulgaris: Groundel, p. 2, f. 132.

Sherardia arvensis: Alysson, p. 1, f. 11, 12.

Sinapis arvensis, S. nigra?, S. alba?: Mustarde, p. 2, f. 137.

Sison Amomum?, p. 2, f. 139.

Sisymbrium: Kresses or Carsse, p. 2, f. 64, 140.

Sisymbrium Irio? p. 2, f. 22.

Smyrnium: Alexanders, p. 2, f. 68.

Smyrnium Olusatrum: Alexanders, p. 2, f. 67.

Sium: Sion, p. 2, f. 139.

Sium angustifolium?, p. 2, f. 32.

Sium latifolium, *id.*

Snowdrop? (Galanthus), p. 2, f. 65.

Solanum Dulcamara: Wilde Vinde, p. 2, f. 168. S. nigrum: Gardin Vinde, p. 2, f. 168.

Solidago Virgaurea, p. 3, f. 78.

Sonchus oleraceus: Sow Thistell, p. 1, f. 55.

Sorbus Aucuparia, S. domestica?, S. Torminalis: Rowne, Sorb, etc., p. 2, f. 143.

Sparganium?

Spiræa Filipendula, p. 3, f. 31.

Stachys Betonica: Betonie, p. 1, f. 33.

Stachys palustris: Yron Wurt, p. 2, f. 135.

Stachys Sideritis, p. 2, f. 135.

Stellaria media?: Chickwede, p. 1, f. 10.

Stellaria Holostea: Stychewort, p. 2, f. 13.

Symphytum officinale: Comfrey, p. 2, f. 148.

Tamus communis: Black Brionye, p. 2, f. 167.

Tanacetum: Tansey, p. 3, f. 3.

Teucrium? sp.: Groudne Pyne, p. 1, f. 53.—I here that it is founde in diuerse places in England.

Teucrium Scordium: Water Germander, p. 2, f. 130.—Common hyssop of Turner is *Teucrium Scorodonia:* what is the other, "whiche is greater muche and stronger than the other hyssop"?

Thlaspi, p. 1, f. 152.

Thymus Serpyllum: Wild Thyme, p. 2, f. 132.

Tilia europæa: Linden, p. 2, f. 153.

Tormentilla, p. 3, f. 74.

Tragopogon minor; Bukke's Bearde, p. 1, f. 31.

Trichomanes (Asplenium), A. Ruta-muraria, p. 1, f. 157.

Trifolium pratense purpureum, T. pratense album, p. 1, f. 158. T. arvense: Hare's Fote, p. 2, f. 26.

Tussilago: Horsehoue or Bulfote, p. 2, f. 159.

Typha latifolia?: Catte's Tayle, p. 2, f. 159.

Ulex: Fur, Whynne, p. 1, f. 18.

Ulmus: Elm tre, p. 2, f. 169.

Urtica romana, U. dioica, U. urens: Roman Nettell, etc., p. 2, f. 169.

Valeriana officinalis: Setwall, p. 2, f. 161.

Valerian, p. 3, f. 75. There is another kynde (*Polemonium cæruleum*)whyche we call Valerian in England, and it hath a blew floure, and is called of some Latine men *Valeriana græca.*

Valeriana (Phu magnum and P. vulgare), p. 3, f. 76.

Verbena, vervine, p. 2, f. 162.

Veronica agrestis, p. 1, f. 10.

Veronica arvensis?, p. 3, f. 77.

Veronica Beccabunga: Broocklyme, p. 1, f. 50.
Veronica Chamædrys: Germander, p. 1, f. 52.
Veronica hederæfolium: Chikewede, p. 1, f. 10.
Veronica officinalis (Salvia Veronica fœmina), p. 2, f. 126.
Veronica serpyllifolia: Paulis Betonye, p. 1, f. 34.
Vinca minor: Perwinkle, p. 1, f. 60.
V. major.—In gardens.
Viola alba, p. 1, f. 163.
Viscum: Mistletoe, p. 2, f. 165.
Xanthium: Clot Bur, p. 2, f. 170.
Yew: Uhe, p. 2, 687.

ISATIS TINCTORIA.

By John Lloyd.

Since I discovered this plant near to the New Wandsworth station upon the Crystal Palace Railway (*vide* 'Phytologist,' August, 1860), several very interesting particulars have come to my knowledge concerning it, which I here submit to the readers of the journal above named.

The plant was grown for several years by Mr. Wilson Saunders, late of East Hill, Wandsworth, and his garden was about half a mile from its present station in the railway cutting.

The question naturally suggests itself, Did it escape from the garden? From the proximity of the garden and the cutting, it may be inferred that it did do so; but, on the other side of the question, that inference may be objected to upon two grounds: first, it has left no traces on the line of its supposed migration, although there is a cutting belonging to the South-western Railway between the above-mentioned garden and the Crystal Palace Railway upwards of twenty feet deep; and secondly, Mr. Saunders removed from Wandsworth to Reigate during the time that the Crystal Palace Railway was in progress, and removed his plants of *Isatis* to his new abode. The suggestion of J. S. M. in the 'Phytologist' for September, 1860, that it was sown amongst the herbage,—appears to be a more reasonable solution to the question,—as to how came it there,—than any other hypothesis which I have seen or heard advanced; and perhaps the plants which he discovered in Kent may owe their origin to a similar circumstance. A short account of the plants which were taken to Reigate may not be uninteresting.

They were planted in a shrubbery, where they have established themselves so firmly as to become almost troublesome weeds, and

escaped into a field adjoining the garden, where I saw a plant in bloom last summer; and if they extend their radius, they may in time establish themselves in the *débris* belonging to the chalk-pits at Reigate Hill, which is scarce half a mile distant.

Mr. Jos. Croucher, a young gardener who has paid some attention to British plants, discovered it in Sussex, in July last, upon a bank near to the turnpike, by the side of the road between Turner's Hill and Rowfant station.

In a conversation which I had in August last with the intelligent foreman of the Botanic Garden at Glasneven, he informed me that it was not uncommon to meet with a stray plant or two in the neighbourhood of Dublin, and he related to me an interesting circumstance which came under his observation some years ago. An old Elm was blown down, and the ground where it had stood was deeply trenched. In the ensuing spring the fresh exposed soil produced a quantity of *Isatis tinctoria* and *Sinapis nigra*, neither of which plants had been before observed to grow in the immediate vicinity.

ON THE FEN AND DITCH PLANTS OF NORFOLK.

By W. Winter, *of Aldby, Norfolk.*

The White Water-lily (*Nymphæa alba*) abounds in the ditches and *broads* (a local word for wide open drains) at Ranworth, Horning, and South Walsham. This, the queen of British plants, flowers here in June and July, and completely covers hundreds of square yards with its broad handsome foliage and its pure white flowers, which in some states of the atmosphere perfume the air with the most agreeable odours, to considerable distances around the places where it grows. It is occasionally found in places whence peat has been dug.

Its yellow and not quite so beautiful associate, the Yellow Water-lily (*Nuphar lutea*), is equally common in all these parts. These two plants may be distinguished by their leaves at all times when these are fully developed. The leaves of the White Water-lily are more circular than those of the Yellow; they are rounded at the apex, and their cordate bases are not so diver-

gent as in the Yellow Lily. The latter has a longer and more pointed leaf, and the basal lobes are more divergent and longer than in its fairer relative.

These are the most conspicuous and the most ornamental plants of our sluggish rivers, dikes, and other deep waters.

Elatine hexandra grows sparingly in shallow pools and in bogs about Ranworth. [This is probably the first record of the locality; and we are pleased to enter it here for the benefit of future botanical geographers, whose scientific utilities and sympathies are not quite extinguished by their personal antipathies.]

Hypericum elodes is also plentiful in the same locality as that reported for the before-mentioned plant. I send a note on this plant to aid the correspondent W. P., who marvels what part of Dartmoor is a hundred yards higher than the Carnarvonshire mountains, where Mr. Bowman (see 'Cybele,' vol. i. p. 253) is reported to have seen it. [The veracious compiler of the last-mentioned abortive effort to exhibit the range of our British plants, thought he saw it rather higher on Dartmoor, in Devon. The wish was father to the thought; he wishes to be thought a farther-seeing and more correct relator of what he fancies he has seen than other men.]

Ranunculus Lingua, although a Ranworth plant, and rather frequent in such places, is not very plentiful in this neighbourhood. Those who want to see this plant in perfection and abundance should visit the old haven at Sandwich in Kent.

The rarest plant in this coronal of Norfolk aquatics is probably *Senecio paludosus*, which occurs occasionally in bogs at Ranworth. The Norfolk botanists should search diligently for *Senecio palustris* (*Cineraria*) and for *Sonchus palustris*. The rediscovery of these plants, which are among the very rarest of England's most precious rarities, will reward the toil of some ardent local investigator. Should this plant be reckoned among the aquatics? Scarcely, for it is found in the same class of habitats as *Sonchus palustris*, which sometimes is an aquatic, but is oftener found in marshy ground only occasionally flooded, and it grows well, or used to grow well, at Kew, in the Royal Gardens, one of the driest spots of England.

Villarsia nymphæoides? I believe I saw this fine plant associated with *Sagittaria sagittifolia* at Ranworth, in some muddy ditches. The author of the 'Cybele,' not always remarkable for

consistency, asserts that this fine aquatic is wild in Norfolk, Cambridge, etc., which he calls its north limit, but that it is certainly introduced in Stafford, Lancashire, etc. (see 'Cybele,' vol. ii. p. 178), and doubtfully wild in the intermediate counties of Warwick and Nottingham. He does not inform us on what evidence he relies for these facts. Probably only his own eyes, which deceived him in estimating the altitude of the moors of Devon, where he saw the marsh *Hypericum* much higher than the mountains of North Wales.

Stratiotes aloides in July and August is common in the ditches at Ranworth. [The readers of the 'Phytologist' may prefer a brief account of the economy of this plant to the useless platitudes of the 'Cybele' about its distribution. Those who care for seeing a sample of unmeaning twaddle, may compare 'Cybele,' vol. ii. pp. 473, 474, with what he has seen or read about the plant.] This plant is very singular in its mode of growth. The numerous radical leaves which spring from its creeping runners, which penetrate far into the mud, and its exotic-like aspect, its flowers, its compressed scape, make an uncommon object. In a ditch that some men were cleaning out, I saw its spreading roots more than three feet deep in the mud, and at least six feet in some places from the body of the plant. It seems to occur all over the Fens, by the rivers Bure, Yare, and Waveney, and several other places in ditches at Loddon, Kirby, Norton, and Toft. If this plant is not a genuine native of England, it is at all events spontaneous in Norfolk.

The last of my aquatic plants is *Potamogeton oblongus*, common at Ranworth, and it flowers in July. This family is well represented in our neighbourhood, both in Norfolk and Suffolk. Here many of the rarer species like the above are common. I intend to send, in the course of the present summer (1861), a series of our *Potamaceæ* for publication in the 'Phytologist,' in order to induce British botanists to pay a visit to this almost *terra incognita* of the British realm.

Review.

The Preston Chronicle for March 17th, July 14th, and August 11th, 1860.

Newspapers, whether of daily or weekly appearance, notice periodicals of all sorts, both monthlies and quarterlies; therefore the subject of this article, not being uncommon, requires no apology.

'Rambles by the Ribble' is the title of a series of very amusing and instructive articles on the antiquities, scenery, natural and civil history of the many interesting localities, towns, villages, churches, monastic remains, manorial residences, etc. etc., which give a more than ordinary interest to one of the prettiest streams of Craven, celebrated for its dales, scars, rivulets, and streamlets.

"Of the many rivers that flow along the valleys of merrie England, there are few that, in the richness of antiquarian and historical associations, the loveliness of the district it waters, or the number of objects of beauty and interest along its course, exceed our own Ribble. In the days of yore the Roman masters of Britain colonized its banks and erected their stations, their homes, their temples, and their altars near its waters. The Danes, Saxons, and Normans have left traces of their ascendency in the names of our towns, villages, and their inhabitants."

Our pages are not quite appropriate for antiquarian or historical lore, and even the pictorial is not always relished by the strictly scientific *simplers*, yet a sprinkling of something readable, interspersed here and there among the clumsy lumbering Latinities of nomenclature and description, is a relief to the reader: it is like a bit of open green common to a weary pedestrian who has trudged long on the dusty highway, with a brick wall or closely-cropped thorn-hedge on his right hand and on his left.

The following plants were collected during an autumn-ramble in the Fylde, between Lytham and the lighthouse, near the very mouth of the Ribble, and not far from Preston. We should like to know the distance, in case we should follow the track of our Preston brethren.

The first-mentioned plant is common in Craven, and probably equally so in North Lancashire; it is one of the rarest of British

plants in the south of England. *Parnassia palustris* (Grass of Parnassus) grows in most of the lower ground among the sandhills in considerable quantities. It is not unknown in Herts and Bucks, but the stations are few and distant.

"In situations similar to those in which we found the Grass of Parnassus we met with large quantities of the *Pyrola rotundifolia* (round-leaved Winter-Green); in fact, in many places the ground was literally carpeted with it."

This plant is a doubtful native of the south of England. Many years ago the writer of this saw at Henfield a living plant, said to be *Pyrola rotundifolia*, and also said to have been found in a part of St. Leonard's Forest called Miller's Race. Can Mr. Borrer or Mr. Mitten, or any other botanist, tell us if this be a Sussex plant?

"A frequent inhabitant of the little grassy hillocks among the sandhills is the *Gentiana campestris* (Field Gentian), which, though not very remarkable for beauty, is yet interesting on account of its rarity.

"The beautiful *Erythræa Centaurium* (Lesser Centaury) is no unfrequent neighbour of the last, and adds materially to the beauty of the floral scene by its very pretty bright pink blossoms. It is a plant beloved of herbalists, on account of its tonic qualities, and is locally termed 'Sanctuary.' But perhaps the plant most frequently to be met with about the sandhills is the *Cynoglossum officinale* (Common Hound's-Tongue). Its dull purple flowers, with their mouse-like smell, had vanished previous to our visit; but we brought back to Preston many mementos of our walk in the shape of numbers of its seeds, which clung with great tenacity to our clothes.

"Between the sandhills and high-water mark there is a great abundance of the *Glaux maritima* (Black Saltwort), and occasionally a few plants of the singular-looking *Eryngium maritimum* (Sea Holly); while in ditches between the sandhills and Marton Moss we saw several specimens of the *Hottonia palustris* (Water Violet). The beautiful lilac-coloured blossoms of the last of course had long departed, the plant blossoming in June, but it was easily recognized, from its peculiarly jagged and divided leaves.

"The most conspicuous perhaps, and one of the rarest, is the *Brassica Monensis* (Isle of Man Cabbage), and we saw abundance of the *Thalictrum minus* (Less Meadow Rue). In the same locality, in their proper seasons, are to be met with *Datura Stramonium* (Thorn Apple), *Lycopsis arvensis* (Small Bugloss), *Salsola Kali* (Prickly Saltwort), *Cakile maritima* (Sea-Rocket), *Trifolium arvense* (Hare's-foot Trefoil), *T. suffocatum* (Suffocated Trefoil), and many others.

"*Anagallis tenella* (Bog Pimpernel), with its lovely rose-coloured blossoms, *Samolus Valerandi* (Water Pimpernel), and *Epipactis palustris* (Marsh Helleborine) are frequently to be met with in the most marshy spots among the sandhills. *Orchis latifolia* (Broad-leaved Orchis) and *Spergula nodosa* (Knotted Spurrey) are not unfrequent neighbours of the three last, but prefer rather drier habitations. From half-a-dozen to a dozen plants of *Asparagus officinalis* (Common Asparagus) are to be found upon one of the sandhills, and how they came there is rather a mystery.

"*Agrimonia Eupatoria* (Common Agrimony) is not unfrequently found upon the sandhills, while *Cochlearia Danica* (Danish Scurvy-Grass) and *Sisymbrium Sophia* (Flixweed) abound on the dry banks and copses in the neighbourhood. The rare *Euphorbia Paralias* (Sea Spurge) and *Silene maritima* (Sea Campion) must not be omitted from our list, the former an inhabitant of the higher part of the hills and the latter of the shore, within a few yards of the base of the hills. There are many other plants, more or less rare, to be found within three miles of Lytham, chiefly on or about the sandhills; but I think those whose habitats are above given are sufficiently numerous to show that Lytham offers quite as many attractions to the botanist as to the valetudinarian and pleasure-seeker."

We shall be well pleased to see more of these lively sketches of scenery, local history, and botany, especially higher up the river, in the direction of Settle, Penighent, etc., with which part of Craven and Lancashire we are better acquainted than we are with the portion between Preston and the Irish Sea.

BOTANICAL NOTES, NOTICES, AND QUERIES.

To the Editor of the 'Phytologist.'

Will you, or some readers of the 'Phytologist' learned in Willows, inform me why no use is made (in any description that I am aware of) of the different colour of the anthers to distinguish between some at least of the different species or varieties of monandrous *Salices?* I find two kinds in this neighbourhood, which, with much doubt, I have assigned respectively to *S. Woolgariana* and *S. Helix*. In the one which I have taken for *S. Woolgariana*, with lighter twigs, the catkins are larger, their scales more downy, and the anthers at first invariably *crimson*. In the other, which I have called *S. Helix*, with darker twigs, the catkins are smaller, their scales less downy, and the anthers invariably *orange*. Babington (Manual, ed. 4) describes the whole group, *Purpureæ*, as having "anthers purple, ultimately black." These both become ultimately black, but at first they are very distinct as crimson and orange.

I am not acquainted with the other monandrous varieties; but between these two at least,—whether I have named them above rightfully or not,—would not this difference of colour in the anthers form a useful mark of distinction for those who, like myself, are much puzzled to distinguish between them? Yet I do not find it anywhere noted. R. E. C.

"*General Post Office, March*, 1861.

"Sir,—In reply to your letter of the 11th inst., I have to acquaint you that books, having specimens of dried plants attached to their leaves, may be forwarded under the regulations of the Book Post, but that such specimens may not be sent loose, nor can seeds be regarded as coming within the privileges of the Book Post.

"All exchangers of plants have to do, is to have a guard-book made, with thin covers, and (say) about 12 or 15 inches long, by 6 or 8 inches wide, and when sending their specimens, have them securely gummed (by means of slips) to the leaves; thus the advantages of the Book Post can be secured to a numerous body who have perhaps hitherto been ignorant of the privilege. I am, yours faithfully, G. W. GISSING.

"Of course no letter must be sent."

[Several of our correspondents have availed themselves of this privilege. We have received and also transmitted hundreds of specimens by post. We thank our excellent correspondent for reminding us that this may not be generally known.]

LIST OF PLANTS FOUND IN THE NEIGHBOURHOOD OF PERTH, BY JOHN SIM, DURING THE SUMMER OF 1860.

Allosorus crispus: Birnam Hill; plentifully. *Anagallis cærulea:* cultivated ground near Perth; very sparingly. *Anchusa sempervirens:* foot of Stenton Rocks, near Dunkeld; abundant and luxuriant, undoubtedly truly wild. *Anthemis arvensis:* fields near Murthley Railway Station; abundant. *Antirrhinum majus:* precipitous cliffs of Kinnoull Hill; certainly indigenous. *Antirrhinum Orontium:* cultivated ground near Perth city; rather sparingly. *Arabis hirsuta:* Stenton Rocks; plentiful. *Asperula odorata:* wood at Stenton Rocks; in the greatest abundance. *Asplenium septentrionale:* near the top of Stenton Rocks; plentiful. *Brassica campestris:* foot of cliffs, Kinnoull Hill; sparingly. *Campanula rapunculoides:* hedges near Bowerswall and Barnhill, and several other places in the neighbourhood. *Carduus acanthoides:* foot of Stenton Rocks. *Carex pallescens:* foot of Birnam Hill, north side. *Cerastium semidecandrum:* summit of rocks, Witch-Hill, Kinnoull parish. *Coriandrum sativum:* waste ground; very sparingly. *Cynosurus echinatus:* waste ground, Witch Hill; sparingly. *Cystopteris fragilis:* stone dikes near Caputh Ferry; luxuriant and plentiful. **Dianthus deltoides:* summit of rocks, Den of Balthayock, Kinnoull parish. *Euphorbia exigua:* cultivated ground near Perth city; rather sparingly. *Geranium columbinum:* rocks, Craigie Moor, near Perth; abundant.* *Goodyera repens:* wood of Scone. *Hieracium boreale?* banks of Tay, near Perth. *Hypericum calycinum:* woods of Dunkeld, one mile east of the town; plentiful. *Lamium maculatum:* wood of Scone, near Palace, probably an escape from cultivation. *Ly-*

copodium alpinum: Birnam Hill, towards summit, north side. **Lysimachia vulgaris:* hedge-side, two and a half miles south-west of Perth, Aberdalgie parish. *Medicago sativa:* border of a field, near Perth; sparingly. *Œnothera biennis:* naturalized in fields about Perth. *Papaver dubium:* cultivated fields. *Papaver Rhœas:* cultivated fields. *Reseda fruticulosa:* dry barren ground, Witch-Hill, Kinnoull parish; only one plant. *Geranium nodosum* and *Pulmonaria officinalis:* in a wood near Scone Palace. *Ribes Grossularia:* Den of Quarry Mill; plentiful. *Rosa systila:* hedges and roadsides; plentiful. *Sagina nodosa:* sandy ground, banks of Tay, two miles north of Perth; sparingly. *Stachys arvensis:* cultivated fields, Kinnoull Hill; plentiful. *Trifolium incarnatum:* cultivated fields, occasionally; very likely an escape from cultivation. *Vaccinium Vitis-idæa:* Birnam Hill. *Verronica peregina:* a weed in cultivated nursery ground; plentifully. *Verbascum nigrum:* waste ground, Witch-Hill; only one plant.

Plants having an asterisk were not seen in a growing state by me. I only saw them some hours after they were gathered. JOHN SIM.

Bridge End, Perth, October, 1860.

BLECHNUM SPICANT, VAR. RAMOSUM, from North Wales.

This very handsome form of *B. Spicant*, figured in 'Nature-Printed Ferns,' vol. ii. p. 226, plate 96, fig. *a*, was recently found near Llanderfel by Mrs. Jones, on a mountain between Cefn Isaf and Sarnan. The above is a new station for this very elegant and rare form.

. . . This coloured variety of the common Primrose we find growing in the hedge-banks of the lane between Llanderfel and Branas Lodge. I do not remember to have noticed it elsewhere. W. P.

SPIKENARD.

In a former number of the 'Phytologist' I stated my opinion that the precious ointment of Scripture, possessed by Mary, and called Spikenard, might have been composed partly of Attar of Roses, which gave it so much odour. I find, in confirmation of my opinion, the following in Bulleyn's 'Simples,' under the head *Roses*:—"Thus do I end this precious flower, called the Rose, which the *Arabians*, for the excellent sweetnesse thereof do call *Narde*." S. B.

In the 'Phytologist' for August last is a question by Q.: What is the genus and order of the Oxberry Plant? I can answer that question: in the counties of Worcester, Salop, and Hereford, the root of the *Tamus communis* is accounted as a good specific for the rheumatism, outwardly applied, and it is generally known to the natives under the name of Oxberry Root (p. 244).

White Bryony is generally known by the name of Mandrake in the same localities. *Agrostemma Githago* is called Cockle; and is not *Psillium* Squill? JOHN LLOYD.

Can any Hampshire reader of this tell the writer what is the *Squatmore* which Mr. Aubrey, in his letter to Mr. Ray (see Derham's 'Letters be-

tween Ray and his Correspondents') says, "grows by the salt-pits, at Lymington, Hampshire, of wonderful effect for bruises: not in any herbal." "This I had," he continues, "from Th. Guidott, M.D., whose father had the salt-works, and is a witness of the cures done by it." QUÆRIST.

NOTE.—The Publisher and the Editor of this magazine have received several letters about an expected "eventuality which we prefer not to indicate here," but which our readers may be told in plain terms is the discontinuance of our publication. They are hereby informed that our intention is to keep the vantage-ground: we have been bullied and we have been wheedled; an appeal has been made to our pockets; and for the sake of science, we have been humbly entreated to give place to our betters.

Our well-wishers are entitled to our gratitude; and we can only inform them, that we will do our best, as hitherto we have done. That we do not know more is rather our misfortune than our fault; and though our station in society is but humble, we do not wish to emerge from our obscurity,—our social rank is quite equal to our expectations and to our wishes. We are not ashamed publicly to profess that our aspirations and hopes are placed on more solid and permanent objects than the profit, distinction, and honour which properly belong to or are the consequents of literary and scientific reputation.

It is not to be dissembled, that the hostile opposition which, in a certain quarter, is expected to be a final extinguisher to the feeble light we have endeavoured to hold up to our less instructed contemporaries, may and ought to have the effect of making us more energetic in their cause, and of trying to improve the material of the 'Phytologist.' This, our readers know, must mainly depend on their continuing to send us such facts as are interesting and useful to those engaged in these pursuits.

In conclusion, we assure them that WE will not adopt any shabby and disreputable means for increasing our circulation.

Communications have been received from

George Wolsey; Tom Stansfield; G. W. Gissing; John Sim; Dr. Windsor; W. Richardson; Rev. R. E. Cole; W. Pamplin; A. G. More; W. Dickinson; Sidney Beisly; Dr. Lindsey; Rev. T. F. Ravenshaw; J. S. M.; W. W. N.; J. G. Baker; J. B. Mackay; G. Davies, Brighton, etc.

BOOKS, ETC., RECEIVED FOR REVIEW.

The Chemist and Druggist, March 15th.
The Todmorden Post, March 23rd.
The Preston Chronicle, March 23rd.
The Chemist and Druggist, April 15th.
Index Filicum, Part II.
Report of the Thirsk Natural History Society.
The Malvern News and Journal, April 10th, 1861.
The Daily British Whig, Kingston, Canada, April 2nd.

4 SE 61

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